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By

P. M. Robbertse

Department of Education, Arts, and Science
Pretoria, South Africa

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Personality Structure of Socially Adjusted and Socially Maladjusted Children, According to the Rorschach Test[1]

P. M. Robbertse

Department of Education, Arts, and Science, Pretoria, South Africa

I. Introduction

A. The Problem and its Extent in South Africa

In South Africa as in most western countries today the problem of the socially maladjusted juvenile has assumed serious proportions. According to data supplied by the Department of Social Welfare of the Union of South Africa, 880 pupils of school age were tried in juvenile courts in the Transvaal in 1948. Sentences were passed on 628 of these. A survey made in the Transvaal schools revealed the fact that .6% of all school children (i.e., approximately 1,400 pupils) were seriously maladjusted in their social relationships.

From the 1950 edition of the Official Yearbook of the Union of South Africa (26) we learn that during 1950, 2,205 European juveniles aged between 7 and 16 years, and 8,004 juvenile adults, aged between 17 and 20 years, were prosecuted, and 1,767 and 6,805, respectively, were convicted.

According to statistics supplied by the Department of Education, Arts, and Science at the end of 1953, there were 1,065 European boys and 621 European girls attending the Schools of Industries of this department. These children were all declared "in need of care" by Commissioners of Child Welfare in terms of the Children's Act (Act No. 31 of 1937) (27). Many of these children are "socially maladjusted."[2] At the same time there were 200 European boy and 29 European girl inmates in the two reformatories of this department. These juveniles are all very seriously maladjusted.

When we acknowledge the fact that only a small proportion of maladjusted juveniles are being brought before the court, and realize that they in turn represent only a smaller section of the total number of socially maladjusted (24, 25), then only can we have an idea of the extent to which social maladjustment occurs in school children. Unfortunately, no detailed survey of the problem in all its facets has yet been made in the Union of South Africa.

B. Aim of This Research

1. The aim of this research was to apply the Rorschach Ink Blot Test to two groups of children. The first group

[1] This survey is an abbreviation of a dissertation submitted by the author for the degree of doctor in the Faculty of Education, University of Pretoria. The author wishes to express his gratitude to Professor B. F. Nel, Dean of the Faculty, under whose guidance the investigation was carried out, for his helpful advice and for constructive criticism. A word of thanks is also due to the National Council for Educational and Social Research for a grant which made this research possible.

[2] For the meaning attached to "socially maladjusted," see section B below.

consisted of socially maladjusted pupils between the ages of 10-13 years; the second was a control group, corresponding in age, and constituting a representative sample of school children in Pretoria, a city with a population of about 160,000. By comparing the different facets of their personality structure as shown by the test, an attempt was made to obtain an insight into the psychoclinical make-up of socially maladjusted pupils.

The experimental, i.e., the "maladjusted" group was chosen because the individuals displayed conduct problems such as stealing, truancy, the use of uncouth language, fighting, destructiveness, unruliness, bullying, teasing, cruelty, begging, vagrancy, assault, and arson. Only predelinquents are included. Juvenile delinquents, i.e., those on whom the court has passed sentence, are not included in this investigation.

2. Furthermore, these data are being presented as a tentative basis for future standardization of Rorschach's test for Afrikaans-speaking pupils between the ages of 10-13 years.

C. Method of Research

Two groups of children, of a hundred each, were used for this study (see Table 1 for age, sex, and IQ of the children). The experimental group consisted of socially maladjusted pupils, while the control group was well adjusted socially, according to the opinions of classroom teachers and headmasters. The control group was chosen according to the principles laid down by Garrett (5), so that the pupils formed a representative sample of Pretoria's school children. The fifteen schools from which the pupils were chosen represent the poorer, middle, and upper classes of the population. The deviate children were chosen from thirty schools, scattered throughout Pretoria. The research worker personally applied the Rorschach Ink Blot Test to each pupil. The IQ's were determined by means of the South African Group Intelligence Test.

For an exact comparison, the differences between the two groups in the Rorschach Test were subjected to statistical calculation.

TABLE 1

AGE, SEX, AND AVERAGE INTELLIGENCE QUOTIENT OF CONTROL GROUP AND OF MALADJUSTED GROUP

Age	Control Group			Maladjusted Group		
	Boys	Girls	Total	Boys	Girls	Total
10 yrs	14	11	25	14	11	25
11 yrs	10	15	25	14	11	25
12 yrs	8	17	25	14	11	25
13 yrs	12	13	25	15	10	25
Total	44	56	100	57	43	100
	Average IQ 100.4			Average IQ 97.5		

D. Method used in Administering the Rorschach Personality Test

Leading research workers with Rorschach's test differ in their application, their marking, and their interpretation of the test. It must, therefore, be clearly stated which method was followed in the present survey. Our procedure is described below.

The approach generally used with psychological tests was followed, i.e., the pupil was put at his ease in order to gain his close cooperation. The approach was worded thus: "Here I have a number of cards all of which have been stained by ink. Ink was sprinkled onto paper, the paper was closed and then re-opened, and these are the results obtained. I shall pass on these cards to you, one at a time, and all you have to do is to tell me what these inkblots look like to you. Remember, all your answers are equally good. When you have finished with a card, then put it down. Here is the first card. Look at it and go on telling me what you see."

The reaction time as well as the time taken over each card was registered noiselessly by a chronometer.

The tests were given to the children in two phases, only to prevent overfatigue.

A special point of controversy is whether the case tested should be given encouragement during the test, as this may influence the quantity of responses. Even experts on the Rorschach test differ on this point (1, 4, 15, 21). In the main the method advocated by Bochner and Halpern (4) was adopted, i.e., to encourage those who respond with difficulty, but only with the first card. After that the subjects are told that all the other cards are to be treated likewise.

E. How the Protocols Were Marked

1. *Location*

The method used by Klopfer (15) was followed, but only up to a point. In its entirety it proved to be too involved. The following is a summary of the method of awarding the symbols in this survey.

(*a*) *Whole responses:*

W: When in the response the blot was seen as a whole.

Wx: When part of the blot was omitted but most of it still was used in the response.

DW: When a part of the blot was used to interpret the whole.

(*b*) *Detail responses:*

A distinction is made between usual and unusual detail responses. In correspondence with Klopfer's method (15), the usual detail responses were subdivided into large usual detail responses (*D*) and the small usual detail responses (*d*).

The distinction between detail responses as put forward by Beck (1) and Hertz (7) proved to be very useful in interpreting the protocols.

All other responses to the blots which could not be classified as either whole or the usual detail responses, were classified as unusual detail responses (*Dd*).

(*c*) *White space responses:*

S: If the white space either in or around the blot was interpreted, such a response was marked by a symbol *S*.

DS: If the white space was seen as complementary to the black blots, for example as a lake, a road, eyes, or a mouth, then the following symbols were used: *WS, DS,* or *DRS* as the case warranted.

2. *Determinants*

F: When the shape of the blot was the sole factor in determining the response, the symbol *F* was used.

F+: This symbol was used for very well perceived shape responses.

F—: This applied to poorly perceived shape responses. The lists of *F+* and *F—* responses, as compiled by Beck (1) and Hertz (7) were found very useful in the present research.

M: This symbol was used when human or humanlike motion determined the response.

FM: When animal motion determined the response.

Fm: When inanimate objects were seen in motion.

M: When abstract things were seen in motion.

FC: When the answer was determined mainly by shape while color was a contributory factor.

CF: When the color of the blot was the main determinant, and the shape was subordinate.

C: When color solely determined the response.

c: Implies the use of light and shade, i.e., chiaroscuro was used to interpret texture.

Fc: When the shape of the blot was the primary determinant, and light and shade secondary.

cF: When light and shade was the primary determinant and the shape secondary.

C': When achromatic colors, i.e., white, black and gray, were the only determinants.

FC': When shape was the most important determinant, with achromatic colors in an auxiliary role.

C'F: When achromatic colors were of primary importance as a determinant, with shape as a secondary factor.

K: When light and shade were used in seeing a three-dimensional impression.

KF: When the main impression was of a three-dimensional picture, shape being secondary to it.

FK: When shape was the primary determinant, and the impression of depth secondary.

kF and *Fk:* When light and shade were used to project a three-dimensional picture on a two-dimensional plane, then the symbols *kF* and *Fk* were applied according to the amount the shape factor influenced the response.

3. *Content of Responses*

For the indication of the contents of responses Klopfer's (16) symbols were used.

4. *Popular and Original Responses*

The criterion for popular responses, as indicated by Hertz (8) and Guirdham (6) was applied in this research, too, i.e., a response was labeled as a popular one if it appeared once in six protocols.

No effort has been made to distinguish original responses.

5. *Interpretation*

At this stage no explanation of the psychological processes represented by the symbols is given, as this will be done when the results obtained by this research are discussed.

II. Number of Answers, Refusals, Reaction Time, and Time per Response

In Table 2 are presented the averages of the number of responses given, refusals of cards, reaction times, and time per response; their standard deviation *(SD)*; the critical ratios *(CR)*, and the percentage chance of a significant difference.

A. Number of Responses

After scrutiny of works on the Rorschach technique (1, 15, 21, 22), it was assumed for the purpose of this study that the following factors, in general, limit the number of responses (*R*) to less than the average: depressive states, a strong ambition to give high quality answers, impaired nervous system, strong inhibitions, feeblemindedness, a poor cultural background, and paucity of interests. The under-ten child usually gives fewer than 20 answers.

On the other hand, the following factors will tend to increase *R* to above average: an empty quantity ambition, elated moods, high intellectual level and range of interests, wealth of associative and ideational processes, artistic ability, and a rich fantasy.

It must be borne in mind, however, that *R*, except in extreme cases, is of diagnostic value only when considered in conjunction with the quality of the answers.

According to Klopfer the range of *R* for normal grown-ups falls between 20 and 40. Rapaport's (21) control group gave an average of about 18, whereas Rorschach contends that normal adults usually give 15-30 answers.

In this study the average *R* for the normal group of children was found to be 21.9; the standard deviation was 11.35. Mean *R* for the socially maladjusted group was found to be 20.3; standard deviation, 15.9. The critical ratio is only .82, and the chances are only 58.8 out of 100 that a significant difference exists between the *R* of socially adjusted and socially maladjusted pupils of 10-13 years of age. Accordingly, we retain the null hypothesis and conclude that no real difference between the *R* of the groups of pupils will be found to exist.

The standard deviation shows, however, that the control group is more homogeneous with regard to *R* than the socially maladjusted group. Eighteen per cent of the maladjusted group gave 5-9 answers. A single case gave 73 responses, another 87, and a third 95. Not a single case of the control group gave fewer than 10 answers, and 3 cases gave from 61-65 answers.

If *R* is taken as the only diagnostic indicator, and if we accept Klopfer's norms (viz., normal *R* lies between 9 and 75), then 18 cases of the maladjusted group will have to be psychologically examined and treated, while none of the control group need further attention.

B. Refusals

The refusal of one or more cards by a testee is indicative of strong inhibitions (22), or of a blocking or resistance against the situation caused by emotional or intellectual incapacity to cope with the situation, or of negativistic aggressiveness directed more against the examiner than against the task (15).

The average number of refusals and the variability in terms of the standard deviation can be readily ascertained from Table 2. The *CR* is 3.87 and the

TABLE 2

AVERAGE NUMBER OF RESPONSES, REFUSALS, AVERAGE REACTION TIME, AND TIME PER RESPONSE

Item	Group	Mean	*SD*	*CR*	Chances in 100‡
Average *R*	C*	21.9	11.4	.82	58.8
	M†	20.3	15.9		
Average No. of Refusals	C	.2	.8	3.82	99.9
	M	.8	1.5		
Average Reaction Time to the Ten Cards	I C	19.3	14.5	2.91	99.6
	I M	27.5	24.6		
	II C	20.6	21.5	.24	18.9
	II M	21.3	16.7		
	III C	17.9	16.2	.78	56.5
	III M	19.7	16.9		
	IV C	18.6	16.3	.83	59.3
	IV M	20.9	23.8		
	V C	14.7	20.3	.24	18.9
	V M	15.3	14.2		
	VI C	22.7	25.6	.01	.8
	VI M	22.7	20.9		
	VII C	19.9	22.6	.58	43.8
	VII M	18.1	20.0		
	VIII C	14.2	17.5	1.19	76.6
	VIII M	17.2	19.1		
	IX C	21.4	21.5	.01	.8
	IX M	21.3	21.5		
	X C	18.4	18.6	.56	42.5
	X M	17.1	14.4		
Average Reaction Time to Colored Cards	C	19.3	15.8	1.63	89.7
	M	22.9	15.6		
Average Reaction Time to Achromatic Cards	C	19.9	20.8	.19	15.1
	M	20.5	12.5		
Average Time per Response	C	28.1	17.1	.80	57.6
	M	29.9	15.6		

* C = Control Group.
† M = Maladjusted Group.
‡ Likelihood of a significant difference.

probability is 99.99% that socially maladjusted pupils will, on the average, refuse cards *more frequently* than socially well-adjusted pupils. It was inferred, then, that socially maladjusted pupils will surpass socially well-adjusted pupils significantly with regard to those psychological qualities which make it impossible for pupils to respond to cards.

Table 3 shows the cards and the frequency with which they were refused by the two groups of subjects.

The contrast between the two groups is most evident in cards I, IV, VII, IX and X.

Card I was refused twice only by the con-

TABLE 3

FREQUENCY WITH WHICH CARDS WERE REFUSED

Card	Control Group	Maladjusted Group
I	2	12
II	6	7
III	0	1
IV	3	13
V	0	2
VI	5	14
VII	1	11
VIII	1	3
IX	1	11
X	0	9

trol group as against twelve times by the maladjusted group, which indicates that a greater percentage of the maladjusted group may have strong initial feelings of opposition and resistance, and be incapable of adjusting to new situations readily.

The maladjusted group is also more susceptible to dark shock (card IV), to the alarming effect of the sexual implications of card VI, to anxiety caused by the diffusion of light and shadow in card VII, and to the effect of the colors in cards IX and X (indicating hidden neurotic tendencies).

C. Reaction Time

The average reaction times to the cards, average reaction times to the colored and achromatic cards, and the average time per answer for each group of pupils can all be readily ascertained from Table 2.

Only as regards the average reaction time to card I was a significant difference found between the two groups of children. The chances are 99.64 out of 100 that socially maladjusted children will, on the average, be found to be more prone to initial resistance against a new task and situation, and to adjust more inefficiently to circumstances with which they are not acquainted.

III. LOCATION

A. The Whole Response (W)

In contemporary literature on Rorschach's test it is assumed that an individual's approach to the inkblots, which was labeled *Erfassungstypus* by Rorschach, corresponds to his approach to actual life situations. There are individuals, for example, who tend to see a situation as a whole and then to summarize it; others concentrate on important outstanding events in the situation; and some concentrate on the unusual, but unimportant, aspects of the situation.

Klopfer (15) points out that, according to the traditional interpretation of Rorschach's test, a relatively high number of *W* responses represents a tendency towards abstract forms of thinking and higher mental activities. He points out, however, that vague *W* responses represent the individual's mental incapacity to organize the inkblot into subdivisions. Such responses are found in the case of persons suffering from certain serious brain diseases. But it is also indicative of a minimum of effort to organize the stimulus material and build it up into a well-organized concept. Furthermore, it can also indicate quality ambition or even compulsory neurotic tendencies. In all cases of individual diagnosis, it is necessary, therefore, to evaluate the *W* responses qualitatively.

Rorschach (22) found the highest number of *W* responses in persons with great freedom and wealth of associations, persons of high intelligence, artists, and persons who enjoy daydreaming. Elated moods tend to increase, and depressive moods to decrease the number of *W* responses.

A South African investigator, B. F. Nel of the University of Pretoria (19) who has approached the problem of *W* responses from a totality and genetic psychological point of view, has pointed out that Rorschach's views on *W* responses cannot be accepted unreservedly. Rorschach's investigations were limited to grown-ups, and, therefore, his considerations are applicable to grown-ups only. Nel's investigations proved that the younger the child, the vaguer and less well defined are the responses, because of the immaturity of the perceptual and conceptual processes.

B. Confabulated Whole Responses (DW)

According to Rorschach (22), confabulated whole answers are indicative of vague form conception, as is found with epileptics, schizophrenics, unintelligent normals, and morons. The confabulated whole responses, according to Klopfer (15), represent a lack of control over thought processes and a tendency to jump to conclusions. Beck (1) considers that the process is *a*logical rather than *il*logical.

Nel (19) contends that *DW* answers are indicative of confabulation, i.e., of fantsy in a wider sense, but as regards children they are

by no means indicative of inferior intelligence. They indicate rather an intelligence on another level—a genetically younger niveaux or level, i.e., a level at which perceptions are of a more concrete nature. According to Nel, *DW* responses in children point to a process of simplification which is also indicative of a lower perceptual level. The fact that the number of *DW* responses decreases according as the age increases is an indication of development of the powers of perception.

C. Incomplete Whole Answers (Wx)

For the purpose of this study, Rapaport's (21) interpretation of *Wx* responses was accepted, viz., that they are indicative of meticulousness and inflexibility which are characteristic of a limited capacity for abstract thinking.

D. Usual Detail Responses (D *and* d)

In material on the interpretation of Rorschach's test, *D* is invariably taken to be the indicator of the individual's practical ability, his interest in and ability to cope with the everyday problems of life. It is an indication of practical common sense which is essential for the satisfactory adjustments to everyday life. This is also the interpretation accepted in this study.

Klopfer (15), furthermore, differentiates between large usual detail (*D*) which, according to the nature thereof, may be called insular, and small usual detail (*d*) of a more peninsular nature. The small usual detail, represents the critical capacities of the individual. This interpretation of *d* was also applied in the present investigation.

E. Unusual Detail and White Space Answers (Dd *and* S)

With reference to the views of Rapaport (21) and Beck (2), it was assumed that unusual detail represents a sense for the unusual, the out-of-the-ordinary situations of life, but it may also be an indication of an artistic bent.

Rorschach's (22) contention that *S* responses represent feelings of opposition was accepted for the purpose of this study.

In Table 4 the responses are compared of the two groups of children in this study with regard to location scores. An analysis of the figures shows that a real difference exists as regards *D* responses (5% level). and (*Dd* + S)% (1% level).

The chances are 98.8% that socially well-adjusted pupils will on the average, be found to surpass socially maladjusted pupils with regard to the psychological qualities represented by *D;* and the chances are 99.9% that the former will on the average, surpass the latter with regard to those personality attributes symbolized by (*Dd* + *S*)%. No significant differences were found to exist between the personality attributes represented by *W, Wx, DW, sum W, d, Dd, S* and *add S* answers.

In the present research an average of 5.10 *W* was attained by the well-adjusted group, which corresponds remarkably with the average 4.70 *W* reported by Meltzer (18) for his control group.

TABLE 4

RESPONSES OF THE TWO GROUPS WITH REGARD TO LOCATION

Location	Group	Mean	*SD*	*CR*	Chances in 100‡
W	C*	3.8	2.3	.66	49.1
	M†	3.1	2.5		
Wx	C	1.1	1.1		
	M	1.2	1.0	.05	4.0
DW	C	.1	.4		
	M	.04	.3		
Sum W	C	5.1	2.0	.78	56.5
	M	4.3	2.5		
D	C	11.8	7.9	2.5	98.8
	M	9.1	7.2		
d	C	2.0	2.9	.43	33.3
	M	1.8	2.9		
Dd	C	2.1	3.9		
	M	3.9	8.8	1.87	93.9
S	C	.3	9.5		
	M	.6	9.6	.24	19.0
Add. S	C	1.3	20.0	.18	14.3
	M	.8	13.5		
(*Dd* + *S*) %	C	7.7	9.2		
	M	13.5	18.1	3.4	99.9

* C = Control Group.
† M = Maladjusted Group.
‡ Likelihood of a significant difference.

TABLE 5
Erfassungstypus

Group	*W* %	*D* %	*d* %	(*Dd* + *S*) %
Control Group	28.7	56.5	6.9	7.6
Maladjusted Group	31.6	47.6	7.4	13.5
Klopfer	20–30	45–55	5–15	<10

F. Erfassungstypus

Erfassungstypus is the name given by Rorschach (22) to describe the individual's approach to the inkblots, and, therefore, also to life situations. He stresses, however, that the total number of *W*, *D*, and *Dd* responses is less important than the relation between these factors. According to Klopfer (15), if an individual follows the gestalt qualities of the blots, without preference for certain areas, the most natural relation would be 20-30%*W*:45-55%*D*: 10%(*Dd* + *S*). He stresses, however, that this relation is not the optimal for every individual, but only the most natural from a gestalt point of view.

From Table 5 it is apparent that not any part of the blots was overemphasized by either group; (*Dd* + *S*)% was the only exception insofar as it was overemphasized by the maladjusted group. The relations for the well-adjusted group correspond with Klopfer's norms, which are given in the third row of the table.

IV. The Movement Responses (*M*, *FM*, and *m*)

A. Human Movement (M)

Movement responses are those which are determined by form and movement, or kinesthetic factors.

Rorschach considered only those responses determined by human or humanlike movements as *M* responses. Animal movement was noted by him, though he did not supply a symbol for it. Some research workers still follow Rorschach's lead, but others, like Klopfer (15), differentiate between human and animal movement and movement of inanimate objects.

With the reference to the meaning which Rorschach and research workers after him (1, 2, 9, 15, 17, 20, 23) attached to movement responses, it was assumed that *M* is representative of the individual's inner activity, of the richness of his inner life, of his original, creative abilities, of his resourcefulness and ingenuity, and of his introversive qualities. It is a component of intelligence; it represents the wish-fulfilling activities of the individual; it is the index of his fantasy, his associative abilities, his most personal life, and it represents those emotional qualities necessary for inner control over emotions and impulses.

B. Animal Movement (FM)

Many research workers distinguish animal movement, but Hertz (9) rightly points out that it is the Rorschach Research Exchange Group, especially, that indicates animal movement by *FM* and movement of inanimate objects by *m*. In this study *FM* is taken to represent the individual's instinctive life, and in relation to *M* it indicates the stage of his emotional development or maturity.

C. Movement of Inanimate Objects (m)

According to Klopfer (15) *m* indicates tensions in the personality. The *m* tend to appear when the individual experiences his inner promptings as hostile and uncontrollable forces instead of as sources of energy at his disposal. This is also the meaning attached to *m* in this study.

It is indicated in Table 6 how the two groups of pupils compare with regard to their *M*, *FM*, and *m* responses. A significant difference was found with regard to their *M* answers, and the chances are 99.99 out of 100 that groups of socially maladjusted and socially well-adjusted

TABLE 6
M, *FM*, and *m* Responses of the Two Groups of Pupils

Determinant	Group	Mean	*SD*	*CR*	Chances in 100‡
M	C*	1.3	1.8	4.6	99.99
	M†	0.6	0.9		
FM	C	3.0	2.3	0.81	58.2
	M	2.7	3.4		
m	C	0.6	0.3		
	M	0.7	1.5	0.26	20.5

* C = Control Group.
† M = Maladjusted Group.
‡ Likelihood of a significant difference.

pupils will be found to differ, on the average, with regard to the psychological attributes symbolized by *M*. We conclude that lack of ability to accept and control one's inner promptings is, on the average, a characteristic of the maladjusted group. The control or well-adjusted group has an average *M* of 1.3.

No significant differences were found in respect to the *FM* and *m* answers of the two groups. This is a very important finding. According to this evidence, the antisocial behavior of the maladjusted group cannot be ascribed to the abnormal strength of their instinctive drives or tensions in their personalities.

D. The Relation between M, FM, *and* m

In a well-developed personality, according to Klopfer (15), *FM* will be found to take a medium position between the dominating *M* on the one side and the unimportant *m* on the other side. If *FM* is missing, it is a sign that the instinctive drives are being repressed. A healthy balance would be one where the sum of *FM* and *m* does not exceed $1\frac{1}{2}$ *M*.

It is apparent from the data of Table 7 that in the case of the control group *FM* exceeds *M* in the proportion of 5:2, and the ratio of (*FM* + *m*): *M* = 6:2 or 3:1, which is twice the amount of Klopfer's norm for adults. The inference follows that children of 10-13 years old when compared with adults, are immature emotionally. Turning to the maladjusted group it is found that *FM* exceeds *M* in the proportion 9:2, and (*FM* + *m*): *M* = 11:2.

TABLE 7

THE RELATION BETWEEN *M*, *FM*, AND *m*

Group	*M*	*FM*	*m*
Control	2	5	1
Maladjusted	2	9	2

It is obvious from these data that the instinctive urges of the maladjusted group are without the necessary control. This group, therefore, lacks the inner maturity necessary for the control of their instinctive drives.

This finding is of great importance. In the application of preventive and remedial programs designed for maladjusted children, those personality attributes represented by *M* will have to be instilled and developed.

V. THE COLOR ANSWERS

A. The Form Color Responses (FC)

After considering the views of Rorschach workers (1, 2, 9, 15, 18, 21, 22), it has been assumed that the *FC* responses are indices of the individual's ability, his willingness and desire to establish emotional relationships with his environment, i.e., the degree of emotional adjustment to his milieu. These indicate his extratensive tendencies.

The color form (*CF*) answers are indications of emotional instability and irritability, of an inability to adjust normally to outer reality, although the desire to do so may be present. Consequently, impulsive acts and emotional storms may occur.

The pure color (*C*) responses are indications of uncontrolled emotional reactions and impulsiveness as is found in very young children, psychotics, and some mental defectives.

With regard to the different types of color answers, the responses of the two groups of subjects can readily be ascertained by examination of Table 8.

On the basis of the findings in Table 8, there is a great probability that socially adjusted pupils will, on the average, significantly surpass socially maladjusted pupils of 10-13 years of age with regard to:

(I) Emotional relationships with outer reality. The control group will display greater ability, readiness, and desire to establish harmonious emotional relationships with outer reality.

(II) Emotional stability and irrita-

TABLE 8
THE COLOR RESPONSES

Determinant	Group	Mean	*SD*	*CR*	Chances in 100‡
FC	C*	2.2	1.8	7.1	99.99
	M†	0.7	1.0		
CF	C	0.3	0.2		
	M	0.7	1.2	3.2	99.8
C	C	0.0	0.0		
	M	0.1	0.2	6.4	99.99

* C = Control Group.
† M = Maladjusted Group.
‡ Likelihood of a significant difference.

bility. The control group will display greater command over their emotions, and will behave with more restraint.

(III) Emotional uncontrollability. The maladjusted pupils have less control over their emotions and will act impulsively. They will also experience emotional storms more frequently than the other group.

It may be concluded accordingly that socially maladjusted children are immature emotionally, and remedial treatment must aim at the emotional development of the child. Children do not behave antisocially deliberately, but because their emotional development is so infantile, so immature, that they are unable to act otherwise.

B. The Relation Between FC, CF, *and* C

Klopfer (15), in agreement with Beck (1), states that young children tend to give *C* answers rather than *CF* or *FC*. But as the child grows older, i.e., as his behavior and conduct is increasingly guided by his reason, *C* tends to disappear and *CF* becomes more important. Up to eight years (15), *CF* will outnumber *FC*, but *FC* will tend to outnumber the sum of *CF* and *C* responses in the normal child after puberty. If a young child has more *FC* and *CF* responses, it is a sign of either overadjustment or precociousness. Rorschach (22), too, attached importance to the relationship between the different color answers.

The results of the present study correspond to Hertz's norms for children (10).

VI. THE *Erlebnistypus* (*M*:*C*)

The significance of the movement and color factors as indices of the individual's emotional life was investigated in the two preceding sections. But it must be remembered that the relation between the movement and color factors (*M*:*C*) is also important in understanding the individual personality (22). The relation between the psychological processes symbolized by *M* and *C*, respectively, was labeled the *Erlebnistypus* by Rorschach. It is a difficult term to translate, but "experience type" is applicable. Rorschach differentiated four *Erlebnistypen*, viz. (*a*) the introversive type (*b*) the extraversive type (*c*) the ambiequal type or ambiverts and (*d*) the coarcted type.

In Table 9 a survey is given of the *Erlebnistypen* of the testees of the present investigation. According to the data of this table, 14% more pupils of the control group than of the maladjusted group display those psychological qualities which characterize the extraverts, i.e., the control group is more capable of adjusting to the outer world normally. Five per cent of the pupils of the control group are ambiverts as against 1% of the maladjusted pupils, i.e., a greater percentage of the control group is capable of establishing intensive as well as extensive relationships with other people. It is evident, too, from the last

TABLE 9
ANALYSIS OF THE *Erlebnistypen*

Group	Extravert	Ambivert	Coarcted	Introvert	Total
Control	39%	5%	28%	28%	100%
Maladjusted	25%	1%	56%	18%	100%

column of the table that 28% of the normal group are introverts as against 18% of the problem group. That means that 10% more pupils of the former group display introversive qualities of personality; there are thus more individuals in the control group who have creative and original thoughts and who possess stable emotional qualities. Finally, it is apparent that 56% of the maladjusted group is coarcted as against 28% of the control group. Depressive moods and emotional dullness will characterize the maladjusted more markedly than the control group.

Hertz (12) ascertained that 28% of a group of 12-year-old children belonged to the introversive category, which is in agreement with the results of the present investigation. Furthermore, she found that 39% of her group belonged to the extraversive category as against 36% of this study. But significant differences between the results of the two studies also exist. Twenty-six per cent of Hertz's material belongs to the ambiequal category, as against only 5% of this investigation. Furthermore, she ascertained only 11% to be coarcted as against 28% of our material.

VII. The Answers Determined by Form (*F*)

It was Rorschach's (22) opinion that the form qualities of the blots were the most important determinant of the responses. For the purposes of this study, answers determined by *F* were differentiated, first, into those in which the interpretation proved to be in compliance with the form qualities of the blot—these were marked *F* +; and secondly, into those answers in which little or no agreement between the interpretation and the form qualities of the blot could be detected—these were scored *F* −.

The relation between the total number of *F* answers and the total number of answers, *R*, is indicated by *F*%, and between the *F*+ answers and the total number of *F* answers, by the symbol *F*+%.

For the purposes of this research it is assumed that *F*% is the index of the extent to which an individual has incorporated the code of society as part of his functioning personality, i.e., to what extent he applies the norms of society to control his instinctive and emotional drives. This control is essentially of a repressive type. A very high *F*% however is indicative of rigidity and inflexibility. It shows that the individual has absorbed the code of society too willingly and excessively.

If *F*% falls below a certain level, it is indicative of impulsiveness and a tendency to act inconsiderately. A very low *F*% is found in those who have not adhered to the code of society sufficiently.

Furthermore it has been assumed that, not taking the pathological field into account, *F*+ is indicative of the individual's intellectual level and of the amount of intellectual control he exercises over other aspects of his personality. It reveals the quality of the individual's apperception or concept-forming processes. It does not reveal the person's perceptual abilities only, but it also discloses his ability to recall associations which correspond with the form qualities of the blot. On the other hand *F*+ is the indicator of the person's affective life, as is shown by the fact that depressive moods increase sharp form perceptions, whereas elated moods tend to have the opposite effect.

The intellectual and affective processes symbolized by *F*+ are united in a solid and inseparable unity, which represents the important aspect of personality, labeled ego strength by Beck (2).

In Table 10 the *F* and *F*+ responses of the two groups of children for this research are compared. It is apparent from the data that the normal group averaged 50.6 *F*%, *SD* 12.3, as against 61.7 *F*% *SD* 21.8 for the maladjusted

TABLE 10

F% and *F*+% Scores

Score	Group	Mean	*SD*	*CR*	Chances in 100*
F%	Control	50.6	12.3	6.42	>99.99
	Maladjusted	61.7	21.8		
F+%	Control	78.3	17.2	5.83	99.99
	Maladjusted	64.2	17.0		

* Likelihood of a significant difference.

group. The *CR* is 6.42 and the probability is >99.99%, therefore, that a real difference will be found to exist on the average, between normal and maladjusted children.

The corresponding values for the $F + \%$ achievements can be readily ascertained from the table. In this case the *CR* is 5.83 and the probability is 99.99% that a significant difference will be found to exist.

The following inferences can now be made:

(I) The maladjusted are, on the average, less spontaneous, and less natural in their relationship with other people, and as a result appear cold and impersonal. They lack the necessary balance of personality, because they repress their inner drives to an extent either too great or too small. The tendency would be to react to outer stimuli either too intensely or too faintly.

(II) The control group, on the average, surpasses the maladjusted group significantly with regard to their concept of reality, i.e., with regard to ego strength or stability of personality.

(III) The control group is more homogeneous than the maladjusted group with regard to the distribution of $F\%$ and $F + \%$.

VIII. Responses Determined by Three-Dimensionality, Texture, and Light and Shade

A. FK *and* Fc *Responses*

Statistically no significant difference was found to exist between the *FK* and *Fc* answers of the two groups. The ratio of $(Fc + FK):F = .21$ for the control group is even less than the lower limit of Klopfer's (15) norm, which is set at .25 of *F*, but the ratio for the maladjusted group is still smaller, viz., .11. The inference follows that the control group, to a greater extent than the maladjusted group, uses tact and insight as shock absorbers in regulating their relationships with the external world (see Table 11).

B. K *responses*

Under this heading all the *K*, *KF*, *k*, and *kF* answers are grouped, i.e., all those answers determined primarily or solely by three-dimensional impressions. (See Table 12.) Students of the Rorschach technique generally agree that chiaroscuro responses are but one of a series of anxiety symptoms.

C. The Achromatic Answers

Under this heading the texture responses (*c*, *cF*) as well as the achromatic (*C'*) answers are included.

For the purposes of this study it has been assumed that the answers determined by light and shadow and creating an impression of depth, of perspective of spatial relationships, i.e., of three-dimensionality, represent feelings of anxiety and insecurity. They are indicative therefore of neurotic tendencies. According to Karen Horney (14), anxiety and insecurity are the most essential determinants of all neuroses.

The results of the present study as regards *K*, *c*, and *C* are summed up in Table 12. There is no great difference between the average *K*, *c*, and *C'* responses of the two groups, but the material lends itself to the following inferences:

(I) The difference between the *K* responses of the two groups is indicative that more feelings of anxiety and insecurity can be expected, on the average, from the maladjusted group than from the control group.

(II) The difference between the *c* responses of the two groups is an indication, on the average, of greater sensitivity and a vague desire to associate with other people on the part of the maladjusted groups.

TABLE 11

FK AND *Fc* RESPONSES

Response	Group	Mean	*SD*	*CR*	Chances in 100*
FK	Control	.8	1.1	1.6	89.0
	Maladjusted	.4	2.6		
Fc	Control	1.3	1.2	1.62	89.5
	Maladjusted	1.0	1.3		

* Likelihood of a significant difference.

(III) The difference between the *C'* responses indicates that the maladjusted group, on the average, suffers to a greater extent from fearful experiences.

IX. CONTENT AND POPULARITY OF ANSWERS

A. Content of Answers

In the present investigation the following content groups and relations between these groups were studied and compared:

(*a*) $(A + Ad)\%$.
(*b*) $(H + A):(Hd + Ad)$.
(*c*) Anatomy responses.
(*d*) Variety of content.

1. $(A + Ad)\%$. For the purposes of this study $A\%$ is taken as the indicator of stereotypy, i.e., unchangeable or fixed attitudes, and therefore, rigidity, inflexibility, and incapability of adjusting oneself.

2. *The Ratio* (H + A):(Hd + Ad). Klopfer (15) points out that the majority of subjects usually detect complete human *(H)* or animal *(A)* forms in the blots, rather than parts or details of human beings and animals. It follows then that the individual must have some unconscious reason for seeing mainly profiles, heads, legs, hands, or other human or animal detail in the blots. Generally the individual replying thus, tends to be overcritical. The critical attitude of the individual as symbolized by human and animal detail answers, must, however, be studied in conjunction with other aspects of the tests, such as the *d* answers.

3. *Anatomy Answers* (At). According to Rapaport (21), a high number of *At* answers is indicative of stereotypy, but to Meltzer (18) as well as Bochner and Halpern (4) *At* answers represent a morbid outlook on life. To Piotrowski (20) *At* answers symbolize intellectual ambition which serves to compensate for feelings of inferiority. Beck points out that *At* is indicative of an undue amount of worry over one's health and organs of the body. The present investigator ascertained that *At* answers represent feelings of melancholy and depressiveness.

4. *Variety of Content*. According to Beck (2), variety of content is an index of the functioning intelligence. It not only represents the intelligence potential, but also the real level of intellectual development attained by formal education and experience. To Bell (3), variety of content is the indicator of the individual's range of interests. In a very penetrating study as regards variety of content Rapaport (21) points out that limited variety of content is an indicator of stereotypy, which in turn may be the result of one or more of the following factors: limited capabilities; a normal adjustment which finds stability in conventions; inhibitions; depressiveness; psychotic blockade of thoughts; anxiety conditions; rigidity; inflexibility and abstractedness.

TABLE 12

K, c, C' RESPONSES

Response	Group	Mean	*SD*
K	C*	.3	9.3
	M†	.5	2.1
c	C	.01	1.0
	M	.1	.3
C	C	.3	.9
	M	.4	1.0

* C = Control Group.
† M = Maladjusted Group.

The results of the present study as regards $A\%$, $(H + A)$, $(Hd + Ad)$, and number of content categories are summarized in Table 13.

TABLE 13

CONTENT OF ANSWERS

Scoring Category	Group	Mean	*SD*	*CR*	Chances in 100‡
A%	C*	53.9	16.2	.10	8.0
	M†	53.6	23.2		
H+A	C	10.0	4.6	1.96	95.0
	M	8.4	7.0		
(*Hd+Ad*)	C	4.9	5.3		
	M	4.9	5.9	.07	5.6
At	C	1.0	2.1		
	M	1.3	2.9	2.73	99.6
Number of Content Categories	C	6.5	1.1	3.71	99.98
	M	5.4	2.6		

* C = Control Group.
† M = Maladjusted Group.
‡ Likelihood of a significant difference.

By further calculations it was ascertained that the ratio $(H + A) : (Hd + Ad) = 2:.98$ for the control group, and for the maladjusted = 2:1.18.

These inferences then follow:

(I) No significant difference was found to exist statistically between the two groups of subjects as regards fixed and unchangeable attitudes, insofar as these are represented by *A%*.

(II) Well-adjusted children of 10-13 years of age will, on the average, tend to give more complete human and animal responses than maladjusted children of the same age. No difference exists as regards the tendency to interpret human or animal detail.

(III) The maladjusted group is, on the average, significantly poorer than the control group as regards (*a*) a morbid outlook on life, (*b*) intellectual ambition which compensates for feelings of inferiority, (*c*) feelings of melancholy, and (*d*) depressiveness.

(IV) Insofar as the number of content categories is indicative of the real level of intellectual development, of a limitation of emotional life, rigidity, inflexibility, and incapability to adjust to new circumstances—to this extent the maladjusted group falls below the control group.

B. Popular Responses

To Rorschach, popular answers (*P*) revealed the individual's ability to adjust, the extent to which he is capable of thinking and doing as other people do. *P* responses, however, are to be considered in conjunction with other facets of the test, e.g., the *D* responses. Modern Rorschach workers have accepted Rorschach's views with regard to *P*.

Hertz (8) compiled a list of *P* answers as differentiated by herself, Beck, Loosli-Usteri, Vernon, and Gardner. In a second list six other responses were tabulated which were accepted as *P* by only four of them. This first list is reproduced here, and also a second list of *P* answers as ascertained in this study. The figures in Hertz's list indicate the number of authorities accepting the answer as *P*. The figures in the list of the present study indicate how many times out of 100 these answers were given.

Hertz and others	*Present study*
Card I. Bat (5), Butterfly (4)	Bat (17)
Card III. Persons, Men, Clowns (5)	Men, people, natives (52)
Butterfly (for center red) (4)	Bow (central red) (17)
Card IV. Animal skin, Fur, Hide, Pelt (5)	Skin of an animal (23)

Card V. Bat, Butterfly (5)	Bat, Butterfly (35)
Card VI. Skin, Fur (W) (5)	Skin of an animal (26)
Card VIII. Animal (Sides) (5)	Animal (figure on sides) (76)
	Card IX. Faces of people (D center bottom) (16)
Card X. Spider (blue on sides) (4)	Spider (blue on sides) (27)
Rabbit's face (green center bottom) (4)	Head of an animal (32) (Hare, Game) (green center bottom)
Worms (green bottom) (4)	Lion (yellow inside) (24)
Caterpillars (green bottom) (4)	

Hertz is of the opinion that the *P* answers accepted by all five of them may be regarded as universal. An examination of the two lists indicates that the *P* answers with possible universal significance were also ascertained as *P* in the present study.

The *P*% scores of the two groups of children of the present research are summarized in Table 14. No significant difference was found to exist statistically between the *P*% scores of the two groups of subjects, the probability being only 61.02%.

X. Summary

This summary consists of two parts; first, a summary of the symbols and relations between symbols, as used in this research to represent certain aspects of the personality structure; second, a summary of the results and conclusions reached in this study.

TABLE 14
P% Scores

Group	Mean	*SD*	*CR*	Chances in 100*
Control	23.6	12.3	.86	61.0
Maladjusted	21.4	17.2		

* Likelihood of a significant difference.

A. Summary of Symbols and Relations Between Symbols

1. The *Erlebnistypus* or experience type is represented by:

a. The ratio between *M* and *C* answers, or *M:C*, where Sum $C = \frac{FC + 2\,CF + 3\,C}{2}$.

b. The ratio between the total number of *FM* and *m* answers and the total number of *Fc*, *c*, and *C'* answers, as follows: $(FM + m)$: $(Fc + c + C')$.

c. The ratio between the responses to the last three cards and *R*, expressed as a percentage; thus, $\frac{\text{VIII} + \text{IX} + \text{X}}{\text{R}}$ times 100.

2. Those personality attributes labeled *control* are symbolized by three different sets of symbols:

a. *Outer control* is indicated by
- *i.* The *FC* answers;
- *ii.* The ratio between *FC* and the sum of *CF* and *C*, thus: *FC*: $(CF + C)$; and
- *iii.* The ratio between the chromatic and the achromatic responses: $(FC + CF + C)$: $(Fc + c + C')$.

b. *Inner control* is indicated by
- *i.* The *M* answers; and
- *ii* The ratio between *M* and the sum of *Fm* and *m*, thus: *M*: $(FM + m)$.

c. *Repressive control* is indicated by
- *i.* The percentage of pure form responses (*F*%).
- *ii.* The percentage answers of good form quality (*F*+%).
- *iii.* The ratio between *FK*, *F*, and *Fc* answers, and *R* expressed as percentage: $\frac{FK + F + Fc}{R}$ times 100.
- *iv.* The ratio of *F* answers to the sum of *FK* and *Fc* answers: $(F{:}FK + Fc)$.

3. Adjustment is indicated by:

a. The absence of symptoms pertaining to anxiety and insecurity.

b. Popular answers.

c. The ratio $W{:}D{:}d{:}(Dd + s)$.

4. Emotional aspects of the personality are symbolized by: (*a*) *M*; (*b*) (*W:M*); (*c*) (*M:FM:m*); (*d*) (*FC:CF:C*); (*e*) $(Fc + c + C'){:}C$; (*f*) *C'*; (*g*) *R*; (*h*) Refusal of cards; (*i*) Color shock; (*j*) Reaction time; (*k*) Difference between reaction

times to chromatic and achromatic cards; (*l*) *T*/*R*.

5. Intellectual aspects of the personality are represented by:
   a. The number and quality of *W* answers.
   b. The number of *M* answers.
   c. Variety of content.
   d. *Erfassungstypus* (approach to problems), as symbolized by *W*:*D*:*d*:(*Dd* + *S*).
   e. Quality of form answers (*F*+%).
   f. Percentage animal answers (*A*%).

6. The individual's critical attitudes are indicated by:
   a. The ratio between *d* and *D* answers.
   b. The ratio (*Hd* + *Ad*):(*H* + *A*).

B. Summary of Results and Conclusions

Two groups of children, one socially maladjusted and the other a control group, were used in this study. Each group consisted of 100 cases. The socially maladjusted group included 57 boys and 43 girls between the ages of 10-13 years, with an average IQ of 97.5. The control group included 44 boys and 56 girls, corresponding in age to the first group, with an average IQ of 100.4; the control group constituted a representative sample of school children in Pretoria, and was well adjusted socially.

1. *Number of Responses*

No statistically significant difference was found between the two groups of subjects with regard to *R*. The inference follows that no significant difference exists, on the average, between the two groups of subjects with regard to the psychological attributes symbolized by *R*, i.e., with regard to inhibitions which are represented by a very limited number of answers, and an empty quantity ambition and a vivid imagination which are signified by a large number of answers.

None of the control group gave more than 70 answers, as against three cases of the maladjusted group. The conclusion is that some individuals of the maladjusted group will display a strong empty quantity ambition. The high incidence of *R*, however, can also be indicative of a strong fantasy on the concrete level of consciousness, which may cause deviate behavior.

2. *Refusal of Cards*

The maladjusted group refused all cards more frequently than did the control group. It is inferred that the maladjusted group to a greater extent than the control group will display stronger feelings of initial resistance and opposition, less ability to adjust to new circumstances, and enervating anxiety which is indicative of neuroses.

3. *Difficulty of Cards*

The maladjusted group to a greater extent than the control group experienced difficulty in interpreting the cards. The former also experienced dark shock, a symptom of anxiety, more extensively than the latter.

4. *Reaction Time*

Only with regard to card I was a statistically significant difference found between the reaction times of the two groups; the maladjusted group responded less rapidly. It is concluded that the maladjusted more than the control group will harbor stronger initial feelings of resistance against new circumstances, and opposition against persons. This is in agreement with No. 2 above.

No statistically significant difference was ascertained between the average reaction times to the achromatic and chromatic cards of the two groups. The higher average reaction time of the antisocial group to the colored cards suggests that maladjusted pupils are troubled to a greater extent by hidden neurotic tendencies.

5. *Location*

No statistically significant differences were ascertained between the *W*, *Wx* and *sum W* answers of the two groups.

A statistically significant difference was found between the *D* achievements of the two groups. On the average, then, the control group surpasses the maladjusted group with regard to practical ability, and ability to cope with the everyday problems of life.

No statistically significant difference was ascertained between the *d* answers of the two groups, and it follows that the two groups agree with regard to their critical attitudes toward life.

No statistically significant difference was found to exist between the *S* and *add. S* responses. The two groups, therefore, appear to be similar with regard to the amount and strength of their feelings of opposition.

A statistically significant difference exists with regard to their $(Dd + S)\%$ achievements. It follows that the maladjusted group will on the average, display a stronger sense for the unusual situations of life.

6. *Erfassungstypus*

No statistically significant difference was found between the two groups with regard to the *Erfassungstypus* or their method of approach to life situations. No part of the blots was overemphasized by either group, $(Dd + S)$ being the only exception insofar as the maladjusted group tends to overemphasize this aspect.

7. *Determinants*

The two groups of subjects were found to differ significantly with regard to *M*. It is inferred that the control group surpasses the maladjusted group on the average, with regard to inner activity, wealth of inner life, originality and creativity of abilities, resourcefulness and ingeniousness, introversive abilities, wish-fulfilling activities, fantasy life, associative abilities, and those emotional qualities necessary for the inner control of emotions and impulses.

No statistically significant differences were found with regard to the *FM* and *m* achievements of the two groups. The inference follows that the two groups are similar as regards the strength of their instinctive life and tensions in their personalities. This is an important finding, as the antisocial behavior of the one group cannot be said to be caused by the strong and uncontrollable instinctive urges or tensions in their personalities. Rather is it caused by an incapability to control these urges, i.e., they lack those personality attributes necessary for inner control. In a remedial program designed for the maladjusted, those psychological qualities represented by *M* will have to be instilled and developed.

Even in the case of the control group *FM* exceeds *M*. It follows that even normal children of 10-13 years of age are immature emotionally when compared with adults.

The control group surpasses the maladjusted group to a statistically significantly degree with regard to *FC* answers. The former excels the latter as regards extratensive tendencies, i.e., ability, willingness, and desire to establish harmonious emotional relationships with the environment. The control group is, on the average, better adjusted emotionally.

The maladjusted group exceeds the control group to a statistically significant degree with regard to *CF* answers. It follows that the former will be found to surpass the latter, on the average, as regards emotional instability and irritability, and inability to adjust to outer

reality normally. The former to a greater extent than the latter will be subject to impulsive acts and emotional storms.

The maladjusted group also surpasses the control group to a statistically significant degree with regard to pure *C* answers. The former surpasses the latter, therefore, with regard to uncontrollability of emotional reactions and impulsiveness.

The *FC* answers of the control group outnumber the sum of their *CF* and *C* answers, while the sum of the *CF* and *C* answers of the maladjusted group outnumbers their *FC* answers. It is inferred that the control group is more developed emotionally, on the average, than the maladjusted group, and the former group to a greater extent than the latter group use their reason to guide their behavior and conduct.

A greater proportion of the control group than of the maladjusted group falls under the extratensive experience type. This is interpreted to mean that a greater proportion of the former than of the latter group are persons with labile emotional lives, i.e., they are capable of establishing emotional relationships with outer reality more extensively and harmoniously.

A higher percentage of the control group than of the maladjusted group is to be classed as introverts; i.e., more individuals of the former group will display rich inner lives, stable emotional lives, originality, and ingeniousness.

A greater number of the maladjusted group than of the control group belongs to the coarcted experience type. A greater number of the former than of the latter will suffer from depressive moods, emotional dullness, and will repress their emotional and instinctive urges more rigidly.

A statistically significant difference was ascertained with regard to the *F* answers of the two groups. The maladjusted group, on the average, surpasses the control group as regards rigidity, amount and strength of inhibitions, and lack of spontaneity. The former lack the necessary balance of personality because they repress their inner urges either too rigidly or too faintly.

A statistically significant difference was also found as regards the *F*+ answers of the two groups. The control group surpasses the maladjusted group, on the average, as regards ego strength, i.e., stability of personality.

The difference between the *FK* and *Fc* answers of the two groups of subjects is not significant statistically (probabilities of a significant difference are 89.4% and 89.48% respectively). The findings, however, suggest that the control group will display more tact and insight than the maladjusted group.

The two groups differ to a statistically significant degree as regards their $(FK + F + Fc)\%$ achievements. The control group, therefore, surpasses the maladjusted group, on the average, as regards efficiency of control over promptings from within.

The maladjusted group gave higher averages for *K*, *c*, and *C'*. The difference is not significant statistically, but the results suggest that the maladjusted group is likely to harbor more feelings of anxiety and insecurity as a result of unfavorable home conditions.

No statistically significant difference was found to exist between the $A\%$ achievement of the two groups. It follows that the two groups agree as regards the unchangeability and inflexibility of their attitudes as represented by $A\%$.

The ratio $(H + A):(H + Ad)$ does not reveal any statistically significant differ-

ence between the critical attitudes of the two groups.

A statistically significant difference was ascertained as regards the *At* answers of the two groups, in that the maladjusted group surpasses the normal group, on the average, with regard to morbidity, intellectual ambition to compensate for feelings of inferiority, and depressiveness.

A statistically significant difference was also ascertained as regards the number of content categories. It is inferred that the control group surpasses the maladjusted group, on the average, with regard to the developmental level of intelligence, flexibility, ability to adjust to new circumstances, and control over associative thinking.

Between the *P*% achievements of the two groups no statistically significant difference was found, although the control group is more homogeneous with regard to the distribution of *P*.

8. *General Conclusion*

Statistically significant differences were ascertained between two groups of subjects on certain qualities of personality, as measured by the Rorschach Ink Blot Test. On some other qualities of personality, as measured by the Rorschach, no statistically significant differences were found. The statistically significant differences are important indicators of the qualities of personality in which socially adjusted and socially maladjusted pupils of 10-13 years differ, and are indicative of measures to be adopted when a remedial program for the behavior deviates is devised.

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